



August 17, 2018

Mr. Edward A Boling
Associate Director
White House Council on Environmental Quality
730 Jackson Place NW
Washington, DC 20503

Subject: Docket ID Number: CEQ-2018-0001

The Council on Environmental Quality last issued National Environmental Policy Act regulations in 1980 – we’ve learned a lot since then. The world has changed. We are confident there is value in Council on Environmental Quality’s effort to update them.

These comments are focused on the extent to which a major purpose of the National Environmental Policy Act – to inform the public of the consequences of a proposed government action – is frustrated by the current structure, medium, and length of the National Environmental Policy Act documents.

Sincerely,

A handwritten signature in black ink, appearing to be "Timothy Male".

Timothy Male, Executive Director
Environmental Policy Innovation Center

“too damn many pages for any man to understand”

As Lin-Manuel Miranda’s Thomas Jefferson states, *“too damn many pages for any man to understand.”* There are many environmental assessments more than 1,000 pages long and some impact statements that exceed 15,000 pages (without counting appendices). The length and complexity of these documents defy comprehension. Period. The Council on Environmental Quality is correct to consider limiting them.

To provide a stronger basis for your action, we encourage you to seek input from social science experts on the cognitive limits of human brains and how exceedingly long documents may frustrate the purpose of National Environmental Policy Act in informing the public about government actions and in giving government employees and project proponents actionable analysis. We also urge you to please consider taking a more logical approach to the page limits you choose. For example, a study of bestsellers has found that the average book length has increased by 25% over the last 15 years – about 350 letter-sized pages. While it is unlikely that any Environmental Impact Statement will ever make a bestseller list, this 350-page target might be a reasonable approximation of the level of text that the public (or experts) can reasonably process, consume, and use. Because analysis should increasingly be shared online, in formats other than pages or text, we also encourage you to establish language that directs agencies to adopt word count limits and other measures of document size that roughly correlate with the page limits you choose. In addition, the Council on Environmental Quality should establish electronic file size limits, as very large file sizes are a barrier to access to members of the public in large parts of the country where reliable access to high speed internet services is lacking.

In with technology

Imagine that your round of National Environmental Policy Act regulations survives for as long as the last – 32 years. Can you honestly imagine that page limits will be relevant to the audiences for these documents in 2050?

In reality, the world has moved past pages and paper altogether and that trend will continue. Technologies that have evolved since the 1970s allow us to consume information using rich, visual and interactive formats delivered through the internet. Visual tools to convey and improve comprehension of information are more pervasive in our schools, media, businesses, and daily lives. Visuals are processed 60,000 times faster than text.¹ Thus, ‘readability’ is the wrong frame for the Council on Environmental Quality to use – comprehension and understanding are more general and appropriate terms and we encourage you to replace the former with the latter in Council on Environmental Quality regulations and policy.

Because of both the length and complexity of documents, the public is largely excluded from access to and understanding the documents. For example, this Council on Environmental Quality Federal Register notice is written at a 16th grade level, way beyond the comprehension ability of most of the public. Just the single opening introductory paragraph of your notice scores as ‘very confusing’ on the Flesch Reading Ease scale developed by the U.S. Navy (a ‘16’ on that scale of 100, compared to Harry Potter books at 65 out of 100). There is a limit to how simple National Environmental Policy Act documents can be made, but at present there is not even a meaningful effort to make this a significant step in decisions around the length and complexity of documents. Requirements of the Plain Writing Act of 2010 do not apply to Council on Environmental Quality or other regulations, however, should apply to National Environmental Policy Act documents because they provide information about a Federal Government service.

We encourage the Council on Environmental Quality to build additional content into regulations to give comprehension, understanding, and utility – which are central purposes of the statute – a more powerful role in dictating how agencies and practitioners develop National Environmental Policy Act documents and how courts review them. We offer a number of recommendations for how to do so:

- 1) Provide more direction to agencies to limit their review to issues that are truly significant to the action in question and direct them to ensure that the content of analyses is proportionally focused

¹ <http://misrc.umn.edu/workingpapers/fullpapers/1986/8611.pdf>

on issues that are significant and the minimum background necessary to understand that significance.

- 2) Require agencies, during the scoping process, to explicitly consider and seek input on whether visual versus text presentation of specific information and issues would better allow the public and other audiences to understand the issue and its significance *and* how the information is presented affects comprehension and understanding of the totality of the analysis.
- 3) Require that all documents be provided in open, machine-readable format and posted online. For example, Thomas, the Congressional website that tracks legislation, provides all legislative documents in three formats: HTML, text, and (machine-readable) PDF. Today, many National Environmental Policy Act documents exist in only one format and that format is often a non-machine-readable PDF. Providing machine-readable text is also consistent with the requirements of the Americans with Disabilities Act.
- 4) We encourage the Council on Environmental Quality to ‘lean in’ through regulatory language that directs agencies to continuously seek and use technologies that expand the use of visual, interactive, and virtual information that improves understanding of the significant effects of a proposed government action.
- 5) Require agencies to provide all data used in analyses in machine-readable form and to restrict agencies from putting information in appendices that is essential to understanding the significant effects covered by the analysis. Appendices are appropriate places to include public and agency comments. Appendices are appropriate for the storage of raw data, including that which allows those with disabilities to access information that is otherwise provided in graphical, visual, or other formats that are especially difficult for those with disabilities to access.
- 6) Where agencies seek exception to go beyond page or content limits you create, require them to document the effects that providing additional content will have in making the entire analysis – and the analysis of significant effects – less accessible to its intended audiences.
- 7) Require agencies to establish accessibility accommodation procedures that make it easier to use visual and interactive

display analyses using the accommodation procedures under the Americans with Disabilities Act.

Electronic storage

The Council on Environmental Quality is, or was until recently, collocated with the U.S. Digital Service, an agency whose expertise is perfectly situated to help the Council on Environmental Quality figure out better options for the storage and archiving of National Environmental Policy Act analyses, appendices, data, and required monitoring reports. Developing a better storage solution would serve the Council on Environmental Quality's goals around public involvement and engagement but it would also enable the Council on Environmental Quality to expand its regulatory direction to agencies to direct them eliminate repeated text from analyses and instead incorporate it by reference to past documents or other online resources. General descriptions of environmental conditions are routine in National Environmental Policy Act documents but could be avoided by using material already developed in the past. Storage of data is an extreme problem because Federal agencies and project proponents pay for repeated data collection on the same environmental attributes and potential project effects without consistent ability to make use of past datasets that cover the same subject. Just as scientific research and data funded by Federal granting agencies must be made publicly available within 12 months, the Council on Environmental Quality should consider requirements to make data required for analyses or monitoring publicly available.

Mitigate to Find No Significant Impact

The Council on Environmental Quality established helpful guidance that should allow more projects to use compensatory approaches to achieve a net effect that negates the need to develop an environmental impact statement. But few agencies have followed or fully implemented this guidance. We encourage you to make it mandatory for agencies to maximize application of your 2011 guidance.

Alternatives in Environmental Assessments

The National Environmental Policy Act statute provides no direction or requirement for alternatives to be analyzed when potential projects do not have significant environmental effects. The Council on Environmental Quality should make clear that the inclusion of an alternatives analysis in environmental assessments is discretionary for agencies and that they must make clear to project proponents that it is discretionary. The Council on Environmental Quality could also amend the definition of 'environmental assessment' to make clear it does not include alternatives analysis.

Mitigation Hierarchy

The Council on Environmental Quality regulations define mitigation to include avoidance, minimization, rectification, reduction, and compensation. We encourage you to amend the definition to exclude rectifying and reducing as these terms are not in frequent, current use and are subsidiary to 'avoid' and 'minimize.'

Projects with Benefits

We believe the Council on Environmental Quality should revise its definition of 'significantly' and associated parts of your regulations to make clear that significant beneficial effects should be described in statements or assessments, but are not themselves triggers for requiring an environmental impact statement and that, where a project only has significant beneficial effects, it is appropriate to consider the use of a categorical exclusion. For some resources, the current definition already focuses significance only on adverse effects. For example, the definition focuses only on adverse effects to endangered species or their habitat and on historic structures. The Council on Environmental Quality should consider how to more broadly limit significance determinations to harmful or adverse effects or those proposed actions that have a net harmful or adverse outcome.